

**THE DEVELOPMENT OF
MUNICIPAL CREDIT MARKETS
IN SLOVAKIA**

Prepared by

The Urban Institute
2100 M Street, NW
Washington, DC 20037

UI Project 06283-150
December 1996

Prepared for

INTERNATIONAL CITY/COUNTY MANAGEMENT ASSOCIATION
Local Government and Housing Privatization
USAID Project No. 180-0034

U.S. Agency for International Development, ENI/EEUD/UDH
Contract No. EUR-0034-C-00-2034-00, RFS No. 150

Executive Summary

This project addressed the development of municipal credit markets in Slovakia. The project was intended to (1) develop and technical assistance plan to develop municipal lending in Slovakia and (2) carry out a seminar on fee-based project finance. A memo containing the technical assistance plan and some follow-up documents are included as Section A of this report, and are based on two field visits which took place in September 1995 and January/February 1996. A memo containing a draft outline and summary of the project finance seminar, carried out in December 1996, is included as Section B of this report.

**Seminar on Project Finance
in the Slovak Republic**

**Sponsored by
US Agency for International Development**

December 4 - 5, 1996

Prepared by
The Urban Institute

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Seminar on Project Finance
December 4-5, 1996
Bratislava, Slovak Republic

Purpose: Develop an overall understanding of the benefits of fee-supported project financing to improve the credit quality of infrastructure financing.

Objectives:

- . Identify types of infrastructure projects that lend themselves to project financing.
- . Understand what financial data are needed and how to use them for project financing.
- . Apply basic project financing concepts to a case study.
- . Define the process of project financing including the steps to be taken and the roles of the various parties.
- . Promote interchange among a diverse group of individuals and organizations who must be involved in project financing.
- . Identify obstacles for project financing and strategies for overcoming them.

Agenda:

December 4

- 9:00 Introduction
- 10:00 Keynote Presentation by Tom Masterson
- 1:00 Solid Waste Case Study
- 4:15 Steps in Financing a Project

December 5

- 9:00 Obstacles to project financing and strategies for overcoming them
- 9:30 Group task on obstacles
- 11:30 Where do we go from here?

Presenters:

Tom Masterson Senior U.S. expert on municipal finance
Fred Rosensweig U.S. training specialist

Participants:

The seminar was designed to bring together actors involved in financing an infrastructure project. Participants included five officials from the national government, five engineers (including one environmental consultant), nine local government officials (including two mayors), eight bankers, one Peace Corps volunteer and one consultant from the Slovak Banking Advisory Center.

First Day

10:00 Keynote Presentation by Tom Masterson

(The slides used by Masterson can be found in Annex V)

The keynote presentation was designed to introduce several concepts in project financing that were new to most of the participants: trusteeship; interest during construction; and debt service coverage. The participants had copies of the information presented on overhead so they could use them as reference when they worked on the case study in the afternoon.

Essential Public Purpose Projects

Mr. Masterson began by discussing what types of projects are appropriate for project financing. He explained the criteria of essential public purpose through example and then asked the participants to explain why this was important in analyzing credit. One participant correctly answered that default is less likely with essential public purpose projects because there will always be demand for the services and thus revenues to pay off the bonds. Masterson then elaborated on what data are needed for credit analysis for several types of projects.

Water and Wastewater Financing

- Historical Revenues
- Source of Fresh Water
- Condition of Waste Water
- Treatment Facilities
- Details of any Water or Wastewater Customer over 10% of Revenues.
- 5 Year Capital Improvements Plan
- Ability to Set Rates and Charges (Legal and Political)

Transportation Financing

- Historical Revenues
- Historical Ridership Trends
- Age and Condition of Fleet
- 5 Year Capital Improvements Plan
- Ability to set Rates and Charges (Legal, political and economically competitive)
- Alternative Transportation Competition, if any.

Housing and Toll Road Financing

- Rely on Future Revenue and Expense Projections
- Both Require Extensive Expertise by experienced firms.
- Each are subjects for a 2-3 day seminar due to unique special process required

Solid Waste Financing

- Estimates of Total Usage
- Individual Estimates of Usage by each Participant
- Firm Contracts with each Participant to "USE or PAY"
- Experienced engineering estimate of facility useful life (Beyond final maturity)
- Assurances of Compliance with Environmental Law and Regulations

Other examples mentioned briefly were an electric utility, airports, health care institutions and higher education facilities.

What is a trustee?

There was considerable discussion on this point because the term and the concept were new to the Slovak participants. After explaining the three major roles of a trustee, Mr. Masterson answered questions on what type of entity usually performs this role and the typical compensation. In the US, another bank that is not the lender often acts as trustee for a fraction of a percentage of the bond value.

1. Trustee for bond funds
 - . Invest bond proceeds (including unspent construction funds) at the highest possible rate of interest, consistent with the securities that are authorized as investments. Manage investment maturities to match the projected construction needs of the issuer.
 - . Pay land costs, construction, engineering, equipment and other approved expenditures directly to vendors. Written authorization from authorized representatives of the issuer of the bonds is required.
 - . Ensure bondholders and participating cities that funds are spent only on the project

2. Trustee for Operating Funds and Debt Service Funds
 - . Receive all funds paid for services by participants
 - . Pay all salaries and operating expenses of the project based on written authorization by the issuer or its representative.
 - . Provide monthly statement of income and expenses and monitor performance against the annual operating budget provided by the issuer.
 - . Receive and invest monthly deposits into the debt service fund

3. Enforce Bond Contract Provisions
 - . Insure that all bond contracts are being enforced.
 - . Notify bondholders in event that any contractual agreements are in default.
 - . Intervene with issuer in the event of default of any bond contract provisions.
 - . Assist in finding new management in event of default

Solid Waste Contracts

Masterson then went into more detail on what provisions would be desirable in a solid waste contract, namely:

- . Must extend beyond final maturity of bonds;
- . Must be unconditional Use or Pay;
- . Should provide for higher charges above the contracted amount of waste;
- . Non-contract users should pay much higher fees;
- . Contract amount should be flexible to allow for increased operating costs.

The participants had the most questions on the second point because it seemed illogical to them that a community should pay for trash that they did not produce. Mr. Masterson pointed out that he was analysing the waste facility in terms of financing and the bonds had to be paid back according to schedule regardless of the level of waste. Communities should also be penalized for using the facility more than their contracted amount because this may reduce the lifespan of the facility.

Interest During Construction

Another new concept for the Slovak participants was interest during construction. Mr. Masterson introduced this concept by referring to a previous example where the participants had calculated the size of the bond necessary to fund a project. He posed the question, "What if the facility takes a year to build? Where do the funds come from to pay the interest for the first year?" In an interactive dialog with the participants, he answered the questions:

- . What is interest during construction?
- . When is it needed?
- . When is it not necessary?

Debt Service Coverage

Mr. Masterson defined debt service coverage as the amount of excess revenue remaining after payment of operating and maintenance expenses and debt service. When something does not go as planned, a debt service reserve fund can help the municipality avoid default. Some participants pointed out that current Slovak law would consider debt service coverage as profits for which the municipality would have to pay tax.

Debt Service Coverage Ratio

Defined as: $\text{Funds available for Debt Service} \div \text{Debt Service Coverage}$

Example:

Revenue: 9,000,000 SK

Operating expenses: 1,000,000 SK

Funds available for debt service: 8,000,000 SK

Debt Service: 6,000,000 SK

Coverage ratio: 1.33

Typical Flow of Funds

Mr. Masterson showed a typical flow of funds to explain where debt service and a debt service reserve fund fits into the financing plan.

Revenue fund Project operating and maintenance expenses Debt service fund Build or replenish
debt service reserve fund Project repair and replacement fund Excess revenue fund

First Day

1:00 Solid Waste Case Study

The participants received the case study after lunch and were given ten minutes to read through it and ask questions before they were broken into four smaller groups. The groups spent approximately one hour discussing the case study and formulating answers. When the large plenary session reconvened, Mr. Rosensweig asked one group for its answer to a question, then asked if other groups had other answers and finally asked Mr. Masterson to comment on the groups' answers.

In the case study, participants had to determine whether the bond issue should include interest during construction and whether there should be a debt service reserve fund. In accordance with the answers they gave on these issues, they calculated the total size of the bond issue, the annual debt service and the annual cost per ton of solid waste disposal at the facility. They then compared the cost as determined by the bond issue, with what they thought was affordable for the communities being serviced by the facility. Finally, they were asked how much debt service coverage, if any, should be included and how the excess revenues should be used.

The groups' answers varied and Mr. Masterson was pleased with the creativity and thought they had applied in answering the questions. Mr. Masterson had designed the case study so there were no right or wrong answers as long as the participants thought through the questions and provided a logical explanation for their answer. For example, one group thought interest during construction would not be necessary because revenues from the existing solid waste facility could be used to pay the interest in the first year. Another group assumed that the bond would have to cover interest during construction because they had no evidence that the existing facility was making a profit which could be used to pay the interest.

First Day

4:15 Steps in Financing a Project

After the case study, Mr. Masterson distributed a hand-out which consisted of a list of tasks necessary in putting together a financing deal for a solid waste project. For each task, Mr. Masterson indicated which actors should be responsible for accomplishing the task and the order and time period in which it should be done. Organizing the project into a series of steps helped the seminar participants understand the development of a deal. However, the participants felt that certain steps such as, "Receive regulatory approval of engineering design and construction plans," would take more time than indicated.

Participants:

Attorney (Law)

Banker/Investment Banker (Bank)

City/Issuer (City)

Engineer (Eng)

Operating Company (Operator)

Trustee (Trust)

PERIOD	TASK	RESPONSIBILITY
Week 1	Engineering report and cost estimates completed	Eng
Week 1	Attorneys prepare 1st draft of contracts between cities and operating company, trustee contracts, bond indenture contract and other legal documents	Law
Week 2	Complete review of all legal documents	ALL
Week 3	Submit contracts to all cities for signing	All cities, Operator
Week 7	Receive all completed disposal contracts between Operating Company and Cities	All cities, Operator
Week 7	Determine bond issue size and cost per ton	City, Bank, Operator
Week 8	Receive regulatory approval of engineering design and construction plans	Eng, Operator
Week 8	Submit bond issue to Finance Ministry for approval	City, Bank, Operator
Week 9	Complete review of all trust agreements	City, Bank, Operator, Trust, Law
Week 9	Execute trust agreements	City, Bank, Operator, Trust, Law
Week 13	Receive Finance Ministry approval	City, Bank, Trust, Law
Week 13	Sign bond purchase agreement	All
Week 14	Deliver bonds and receive payment	All
Week 15	Award construction contract	City, Operator, Trust

Second Day

9:00 Obstacles to project financing and strategies for overcoming them

Fred Rosensweig introduced this session by asking the participants to think of obstacles to project financing in terms of social, financial, legal, institutional and political problems. The participants then broke into three groups, discussed obstacles, devised strategies for overcoming them, and recorded their answers on flipcharts. After an hour of discussion, the plenary group reconvened and a representative from each group presented their results.

Social/Economic Obstacles

- Young people and businesses are migrating from small town and villages to larger cities because the small towns do not have the infrastructure to support businesses. This means that the

remaining residents are less able to pay higher fees for infrastructure services.

Financial Obstacles

- Lack of long-term loans
- State Environmental Fund can only play a small role (it provides funds for only one year)
- Municipalities have few income sources and little control over these sources

Legal Obstacles

- Public procurement law is unrealistic and makes bidding process very complicated
- Continuing confusion over property rights deters investment
- Prices for utility services controlled by the central government
- In the tax laws municipalities are treated like a business in that excess revenues are considered taxable profits

Institutional Obstacles

- Small municipalities do not have expertise to put together deals
- Need clear contracts between the municipality and the operator
- The existing utility monopolies are not devoting enough funds to investment, thus requiring the municipality to spread its investment funds too thin.

Political Obstacles

- Government instituted new laws on environmental standards, but has not provided money, nor new laws to support capital markets nor laws to encourage foreign investment
- Municipalities pay environmental fines to the central government and do not receive a portion back to invest in new infrastructure

Strategies

- Pressure by ZMOS on the government to make necessary legislative changes
- Create a legislative newsletter or some method for informing municipalities of relevant changes in legislation
- Municipalities should combine resources (people and funds) to finance infrastructure projects
- Tap into foreign capital as a source of financing
- Develop long-term investment plans at the local and national levels

Second Day

11:30 Where to go from here?

In addition, Mr. Masterson made some final comments on issues that he thought are important for the future of project financing in the Slovak Republic:

- Information flow. Municipalities should establish a standard reporting system of their financial accounts. For the system to be useful, it is important that the municipalities publish the bad news as well as the good news.
- Improve credit quality. Mr. Masterson warned that a string of defaults could destroy investor

confidence in municipal financing. Someone should analyse the banks' loans and identify problem loans today to prevent default in the future.

From the Local Self-Government Assistance Center, Mr. Kennedy Shaw made these suggestions for future cooperation:

- . Get financial help for realization of these projects.
- . Get technical help from engineers.
- . Need combined efforts from municipalities, bankers and engineers to overcome the obstacles.

From the Harvard Institute for International Development, Mr. Kim Kiley expressed his interest in working with some of the participants in the future on these issues:

- . Development of a capital market in Slovakia. In the US, the capital market includes pension funds and other investors who prefer safe long-term loans.
- . Bringing together Western lenders with Slovak municipalities and banks. Kiley can use his understanding of Western practices to help Slovaks put together advantageous deals.

Annex I

List of Attendees:

Name	Function	Organization
Jaroslav Janovic		Dept of Water Mgmt, Ministry of Agriculture
Frantisek Focko		Dept of Water Mgmt, Ministry of Agriculture
Marta Leskova	Fund Resources Assistant	State Environmental Fund
Daniela Kobeticova	Deputy Director	State Environmental Fund
Pavel Baluziak	Senior Advisor	Ministry of Domestic Affairs
Koloman Ivanicka	Head of the Faculty	Faculty of Construction Engineer, Slovak Technical University
Kornel Gajdar	Doctorant	Slovak Technical University
Martin Carsky	Trade Director	COVSPOL, Bratislava
Karol Pivovarcy	General Director	Geologia, Bratislava
Juraj Farkas	Environmental Consultant	Self-employed
Otto Dovjak	Mayor	L'ubica
Matus Bystriansky	Mayor	Dolna Strehova
Ladislav Brazdovic	Deputy Mayor	Modra
Jozef Harvancik	City Manager	Bratislava-Karlova Ves
Zelmira Bonova	Head of the City Estate Service	Lucenec
Jan Miskov	Deputy City Manager for Financial Issues	Bratislava-Vrakuna
Hana Dienerova	Head of Financial Dept	Tnava
Peter Juriga	Marketing Assistant	Tnava
Katarina Krajcovicova	Head of Financial Dept	Topol'cany
Marta Sabova	Capital Market Specialist	Pol'nobanka, Bratislava
Eva Strbova	Senior Manager of the Investment Dept	Pol'nobanka, Bratislava
Eliska Hupkova	Main Methodology Expert for Foreign Loans Dept	VUB VseObecnaBanka
Anna Baronova	Senior Manager for Capital Investments	Investicni Banka
Milan Zemanik	General Director of Active Trading Division	Slovenska Sporitelna
Slavomir Brudnak	Branch Manager	Postova Banka, Zilina
Vladislav Bachar	Senior Manager of the Financial Dept	Prva Komunalna Banka
Eva Cuirikova	Commercial Specialist of Financial Projects	Prva Komunalna Banka

Jill Tirnauer	USPC Volunteer, Small Business Devt	USPeace Corps
Bard Stermasi	Consultant	Slovak Banking Advisory Center

Annex II

Seminar Evaluation

To help us create better seminars in the future, we are asking for your comments on this seminar. Please feel free to give more detailed responses instead of or in addition to a rating.

1. How effective did you find the case study format of the seminar?

excellent	good	satisfactory	poor
7	10	3	1
no answer			
1			

2. Would you suggest an alternative format for future seminars? Please specify.

- No answer. 6
- No. 8
- Two case studies - not so "American". /US Peace Corps volunteer, MA of urban planning/
- Better, more comprehensive legal/political representation. /consultant, MBA/
- More thorough solving of problems.
- This is satisfactory.
- Study going more into depth and more details.
- I liked the group work, I think in a smaller collective the mutual communication is better.
- To work up - to complete more comprehensive information so we can take it home.
- Do not be limited to just one form of financing, the ability of flexible use of certain financing. As for me the limitation of one form made us to be stuck just in one space, without the effort to cross the local horizon.

3. How useful did you find the written materials distributed at the seminar?

excellent	good	satisfactory	poor
6	11	5	0

4. Would it have been helpful to have received the materials ahead of time ?

yes	no	maybe
11	5	8

5. How would you rate the effectiveness of the general sessions?

excellent	good	satisfactory	poor
11	9	2	0

- the effectiveness of the general sessions increased after having an opportunity to have separate sessions

6. How would you rate the effectiveness of the break-out session on the case study?

- | | | | | |
|--|-----------|------|--------------|------|
| | excellent | good | satisfactory | poor |
| | 17 | 4 | 0 | 1 |
- everyone have had a chance to speak
7. How would you rate the effectiveness of the break-out session on identifying obstacles to project finance?
- | | | | | |
|--|-----------|------|--------------|------|
| | excellent | good | satisfactory | poor |
| | 14 | 6 | 2 | 0 |
8. Do you think enough time (or too much) was devoted to the break-out sessions?
- | | | | |
|--|-------------|-----------------|---------------|
| | enough time | not enough time | too much time |
| | 15 | 4 | 3 |
9. Do you feel you had adequate opportunity to raise and discuss issues of importance to you?
- | | | |
|--|-----|----|
| | yes | no |
| | 19 | 3 |

Please give your suggestions for future seminars.

10. Do you think that future seminars on this topic should include a mix of government officials, bankers and engineers, as were represented at this seminar?

- Yes. (14)

- Yes, more focus on solutions/options. /consultant, MBA/

- The participation of a wider community would be useful. /engineer, Csc/

- Especially competent people from different spheres, so that the conclusions of the seminar would find further respond. /engineer/

- Such a combination is good, I think, yes. /engineer/

- Surely. /engineer/

- Yes, the problems could be discussed more thoroughly. / - , university/

11. Should this subject be covered again, with more depth?

- Yes. (13)

-No. (3)

- Yes, with specific/focused solution discussion. /consultant, MBA/

- Yes, including legal aspects and conditions of foreign capital being present. /engineer, Csc/

- Should be a concrete problem, which is not simple. /engineer/

-Yes, but concentrate, if possible, on more immediate solutions.
/US Peace Corps volunteer, MA of urban planning/

- In certain parts - concrete knowledge from the bank sphere, legislation. /engineer/

- No, with regards to the specialization of participants of the seminar /different professional fields/.

12. What other topics would you suggest for future seminars? Please rank in order of priority.

- Alternative financing techniques. /consultant, MBA/
- 1.The process of negotiation with foreign investors.
- 2. The content of projects.
- 3. How capital markets work.

4. Issue of obligations in freely changeable money and their selling on world markets.
5. Search for strategic partner. /engineer, Csc/
- According to me the issue of banking sector from the point of import and export projects. /engineer/ financing of
 - Creation of the budget of the town. Enterprising of the city. /engineer/
 - To set the price of communal bonds in accordance to bonds of the issuer, the conditions of the capital market. /engineer/
 - Source of financing in other states.
 - The system of funds in other states. /engineer/
 - The solution of other themes included in the materials: construction of houses, public transportation. /engineer/
 - 1. Lobbying for municipalities, banking industry, capital financing.
 - 2. Long range financial planning for municipalities. /US Peace Corps volunteer, MA of urban planning/
 - 1. The resource for financing cities and villages.
 - 2. The tax system in the Slovak Republic in comparison with other countries.
 - 3. Enterprise in cities and villages. /engineer/
 - More specific participation of legal advisors and then the problems of municipalities - investors, taxes, property - participation in enterprises etc. /engineer/
 - From the point of wider relations. Knowledge and examples from the US. To make more concrete certain groups of projects /financial and legal conditions/. /engineer/
 - 1. Contracts between the service provider and the city.
 - 2. Work with the public.
 - 3. How to find and attract the investor.
 - 4. Long-term financial planning. /engineer/
 - The possibilities of financing public projects and in what extent. / - , high school/
 - Mortgage banking, solution of questions of financing house construction under conditions in the Slovak Republic. / - , university/
 - To concentrate on the financial issues of public projects. /engineer/
 - Project financing of house construction. /engineer/

13. Would you prefer one-day seminars?

yes	no
11	9

- depends on the theme /engineer/

- according to the quantity and quality of information /engineer/

14. Other comments:

- Written materials should not be presented from fax output. Professional considerations. /consultant, MBA/

- It was very interesting. /engineer/

- More application on Slovak conditions. /engineer/

Site and Support Arrangements:

15. How would you rate this site as a seminar location? Please identify any problems.

excellent	good	satisfactory	poor
16	6	0	0

16. How would you rate the support arrangements for the seminar? Please identify any problems.

excellent	good	satisfactory	poor
15	6	0	0
no answer			
1			

17. Please rate the quality of interpretation for each interpreter:

According to everyone all interpreters were excellent.

Annex III

Financing a Solid Waste Facility - A Case Study

Seventeen towns and villages, with a combined population of 30,000 people, are using unlicensed landfills for dumping their solid waste. They are paying fines for their failure to use a licensed landfill and the existing sites may be closed by 1998 if no progress has been made on creating a new facility. There are currently 10,000 tons per year of solid waste being delivered to the several existing landfills.

The towns and villages jointly have created an operating company known as the "Dumpster Company", referred to as Dumpster.

Dumpster operates an existing landfill under one year contracts with several towns and villages, and is proposed to be the operator of the new facility when it is completed.

The new facility has been designed by experienced engineers and has been approved as to design by all appropriate environmental and local authorities.

When completed in three phases, the landfill will have a useful life of 20 years, assuming that the projected amount of solid waste is delivered.

Phase 1 is estimated to cost 20,000,000SK and can be completed in 12 months. Construction is estimated to begin on March 1, 1997.

Phase 2 is estimated to cost 15,000,000SK and will be needed in 5 years and phase 3 is for 10,000,000 and needed in 10 years.

For our purposes, we will deal only with phase 1 financing needs.

The 20,000,000SK construction cost includes equipment, operating contingency funds, and site preparation. It does not include financing costs such as interest during construction and debt service reserve funds.

Operating and maintenance costs of the new facility are expected not to exceed 1,200,000SK per year for processing the same 10,000 tons per year.

Currently, the users are paying a fine of 270SK per ton to the Environmental Fund for the use of unlicensed landfills. Current operating costs have been approximately 280SK per ton.

Arrangements have been made with a bank to purchase the debt at an interest rate of 15.5% . The bank has indicated willingness to accept a 15 year amortization schedule with an 8 year final maturity, meaning that some refinancing will be necessary on or before 8 years.

Long term contracts with each City or Village are a requirement of the bank's loan commitment.

You are challenged to calculate the total amount of the financing needed for phase 1. (Rounded to the nearest 1,000,000SK)

In order to make the calculations, you must decide these questions:

1. Do you need to include interest during construction in the bond issue?

Yes or no: _____

Why?

2. Do you believe that there should be a debt service reserve fund equal to one year's interest on the debt? (Although Debt Service reserve funds normally equal one years interest and principal payments, for this example, we will use one years interest as the amount needed for the reserve.)

Yes or no: _____

Why?

3. In order to do the following calculation, it is recommended that you arbitrarily test several bond issue sizes in order to determine the correct amount of the bond issue. For example, if you select 30,000,000 SK as a bond issue "test size", then determine the amount of interest during construction and debt service reserve fund and add to construction cost number to determine the validity of your "test" bond issue size.

Calculation:	Construction and equipment costs:	_____ SK
	Interest During Construction:	_____ SK
	Debt service reserve fund:	_____ SK
	TOTAL SIZE OF BOND ISSUE	_____ SK
	(Rounded to nearest 1,000,000)	_____ SK

Now that you have reached a decision on the total size of the bond issue, you will need to determine the annual debt service payment for principal and interest. Based on a 15 year amortization schedule and a 15 1/2% interest rate, the annual amortization factor is .175171.

4. To determine annual debt service, multiply that factor by the total bond issue size that you have determined to be needed.

Annual debt service will be: _____ SK

5. Having determined the annual debt service payment and having been given the annual operating costs of the facility, what is the total annual cost per ton of solid waste at the new facility?

Answer: _____ SK

6. In your opinion, can the participating towns and villages afford these costs?

Yes or No: _____

7. How much debt service coverage do you think should be included?

- ☐ None
- ☐ 110%
- ☐ 125%
- ☐ 150%
- ☐ other

8. If you gave an answer other than "None", how would you recommend that excess revenues (over and beyond that needed for operations, maintenance and debt service) be used?

- ☐ Returned to towns and villages.
- ☐ Used for early debt retirement
- ☐ Held in reserve for unexpected needs

9. Do you have other suggestions on how to reduce the costs or alternative ways to finance the facility?

Answer:

Annex IV

SOLID WASTE FINANCING

(Some of the following information is excerpted, with permission, from *Municipal Financial Criteria 1996*, by Standard & Poors Corporation. Changes in the text have been made to adapt to circumstances in the Slovak Republic. Use of this information is limited solely to participants in a Seminar on Project Financing in Slovakia in December 1996.)

Key Criteria

Credit assessment of solid waste financing focus on four interrelated factors.

- * Legal provisions
- * Service area economy
- * Operations
- * Finances and costs

Special concerns would relate to environmental laws and regulations within Slovakia.

Legal Provisions

Legal provisions are defined through the Bond Indenture, Trust Agreements and other legal documents, which outline the basic structure of the financing. Whether the structure provides for a system or a project financing, the analysis focuses on the security for the bonds and identification of the revenue stream.

All contracts concerning service, operation, construction and usage have credit implications. The revenue stream pledged under these documents can vary considerably. A mixture of disposal fees (tipping fees) and a municipal entity's credit can be pledged. The nature and diversity of the revenue stream is an important factor given the transportability of solid waste. A system or facility which receives all or most of its revenue from tipping fees paid by private haulers is likely to be more vulnerable to competition than a system that can use alternative revenue streams, such as household disposal fees.

A detailed analysis begins with the identification of the source of cash flow for debt service payments. The ultimate credit strength is the primary revenue stream such as tipping fees or a general fund pledge. Through a service agreement (contract), a municipality or municipalities might covenant to make payments from its general funds or pledge its full faith and credit.

When a user fee is pledged, analysis must include a look at the user fee and how it is collected and assessed.

Under different operating scenarios, the legal structure must provide a sufficient revenue stream to cover both operating costs and debt service payments. The legal structure should provide a revenue stream that can be maintained despite additional maintenance cost, lower throughput and outages caused by either system failure or environmental requirements. The ultimate or primary revenue stream must have the flexibility to make up for any declines in revenue flow from a more unpredictable secondary stream. Here, reserve funds may be required to provide a bridge from one budget year to the next depending on the flexibility of the primary revenue stream.

One unique concern that must be addressed by solid waste issuers is the transportability of solid waste. Since there is usually no direct link between the solid waste utility and the customer, the haulers collecting the waste can choose the disposal site. The ability to direct waste to the project or system's facilities, provides an important link between the waste generator and the disposal system. Waste flow control can be provided by municipal ownership of collection vehicles, some contractual arrangements or through economic means. Due to the competitive nature of the solid waste industry, a system which can not effectively retain the waste flow, is generally not considered investment quality.

Service Area Economy

Employment, population trends, and wealth and income indices are reviewed (as part of credit analysis) to establish the underlying economic strength of the service area and its capacity to repay the financing. Service demand (garbage flow) typically reflects the service area's economic activity. As a starting point, historical garbage disposal alternatives, quantity of waste, and costs are reviewed. Per capita disposal rates can be indicative of the volatility of the waste flows and the effectiveness of recycling and reduction programs.

Next, a review of the area's future disposal alternatives and reliability of facilities is important. Competition from alternatives (versus control of the waste stream) is assessed to understand quantity projections. The capacity of all available facilities both on an annual and a lifetime basis is then compared to the forecasted service area demand. If surplus capacity exists, an analysis is performed of the additional costs and exposure inherent in carrying that excess. If the facilities are inadequate to handle current or projected service area demand, the evaluation includes the cost of financing additional facilities.

Operations

Considerations include the service providers flexibility in handling changing requirements while still fulfilling its primary purpose. Waste disposal methods must address a number of environmental issues. A system that has the flexibility to respond to changes in environmental regulation is viewed favorably.

Another consideration is the debt amortization schedule versus the useful life of the facility. The expected life of the landfill should match the term of the debt and the legal structure should provide flexibility to respond to the variability in landfill life if the waste flow levels change.

Useful information to obtain prior to financing could also include an independent engineer's report and historical operating records, if available.

Finances and Costs

In evaluating finances, the concern is the quality and amount of debt service coverage. A review of different operating scenarios must demonstrate sufficient debt service coverage in all cases. Costs of waste disposal must be related to the ability to pay. Control over and management of future operating costs must be considered.

By operating its own landfill a city generally has more cost control. Landfill closure costs can be substantial and should be amortized over the life of the landfill.

Costs should be reviewed in terms of "tip" fees per measure of weight. The competitive position of the "tipping" fee impacts financial performance.

Credit Support

Some Cities may find it desirable to lend their credit to the support of a solid waste project by agreeing to add a guarantee of the debt through a general fund pledge of the credit of the City or Cities.

If credit support is a part of the financing package, it should not diminish the need to observe most of the steps outlined previously. The ultimate success of the project could depend on any of the aforementioned procedures.

Documentation requirements

Typical requirements that would be required in conjunction with a credit rating review:

Financial Information

- + Five years of financial reports (if available)
- + Current year's budget

Legal Information

- + Bond Resolution
- + Trust Indenture
- + Disposal and transportation contracts
- + Solid waste management plan

System Information

- + Engineer's report or feasibility study
- + Anticipated capital improvement program
- + Three to five years of historical and projected rates
- + Three to five years of operating statistics (if available)
- + Customer or hauler trends
- + Waste flow quantity

Additional Requirements for Project Financing

- + Copies of construction, service and operating contracts
- + Copy of Site lease, if appropriate
- + Vendor performance guarantees, if appropriate
- + Project operating statistics (if applicable)
- + Throughput
- + Capacity factor

FINANCING
IN THE
SLOVAK REPUBLIC
DECEMBER 1996

PURPOSE:

1. Develop an overall understanding of the benefits of fee-supported project financing to improve the credit quality of infrastructure financing.

OBJECTIVES

1. Identify types of infrastructure projects that lend themselves to project financing.
2. Understand what financial data are needed and how to use them for project financing.
3. Apply basic project financing concepts to a case study.
4. Define the process of project financing including the steps to be taken and the roles of the various parties.
5. Promote interchange among a diverse group of individuals and organization who must be involved in project financing.
6. Identify obstacles for project financing and strategies for overcoming them.

TYPES OF PROJECTS

Criteria: Must be

"ESSENTIAL PUBLIC PURPOSE"

---Examples---

*** Water

*** Waste Water

*** Solid Waste

*** Transportation

*** Housing

*** Toll Roads

DATA NEEDED

for

Water and Wastewater Financing

*** Historical Revenues

*** Source of Fresh Water

*** Condition of Waste Water Treatment
Facilities

*** Details of any Water or Wastewater Customer over
10% of Revenues.

*** 5 Year Capital Improvements Plan

*** Ability to Set Rates and Charges (Legal and Political)

DATA NEEDED

for

Transportation Financing

*** Historical Revenues

*** Historical Ridership Trends

*** Age and Condition of Fleet

*** 5 Year Capital Improvements Plan

*** Ability to set Rates and Charges (Legal, political and economically competitive)

*** Alternative Transportation Competition, if any.

DATA NEEDED

for

Housing and Toll Road Financing

*** Rely on Future Revenue and Expense Projections

*** Both Require Extensive Expertise by experienced firms.

*** Each are subjects for a 2-3 day seminar due to unique special process required

DATA NEEDED

for

Solid Waste Financing

- *** Estimates of Total Usage
- *** Individual Estimates of Usage by each Participant
- *** Firm Contracts with each Participant to "TIP or PAY"
- *** Experienced engineering estimate of facility useful life
(Beyond final maturity)
- *** Assurances of Compliance with Environmental Law
and
Regulations

ESSENTIAL PUBLIC PURPOSE

List types of revenue producing

infrastructure projects that you consider to be essential public purpose:

Why is this important in credit analysis?

Water

Wastewater

Electric Utility

Solid Waste

Public Housing

Transportation

Airports

Health Care Institutions

Higher Education Facilities

Toll Roads

POTENTIAL TRUSTEE

FUNCTIONS

1. CONSTRUCTION FUNDS

2. OPERATING FUNDS and DEBT SERVICE FUNDS

3. ENFORCE BOND CONTRACT PROVISIONS

1. CONSTRUCTION FUNDS

- * Invest unspent construction funds
- * Pay construction invoices (with approvals)
- * Insure bondholders and participating cities that funds are spent only on the project

2. OPERATING FUNDS and DEBT

SERVICE FUNDS

- * Receive income from users

or

- * Receive and invest monthly deposits into the debt service fund

- * Pay operating invoices and expenses

- * Make debt service payments

- * Manage all cash and investments

3. ENFORCE BOND CONTRACT

PROVISIONS

- * Intervene on behalf of bond holders
- * Assist in finding new management in event of default

SOLID WASTE CONTRACTS

1. MUST EXTEND BEYOND FINAL MATURITY OF BONDS
2. MUST BE UNCONDITIONAL USE OR PAY
3. SHOULD PROVIDE FOR HIGHER CHARGES ABOVE THE CONTACTED AMOUNT OF WASTE
4. NON CONTRACT USERS SHOULD PAY MUCH HIGHER FEES
5. CONTRACT AMOUNT SHOULD BE FLEXIBLE TO ALLOW FOR INCREASED OPERATING COSTS

SOLID WASTE CONTRACTS

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WHY?

SOLID WASTE CONTRACTS

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WHY?

SOLID WASTE CONTRACTS

5. CONTRACT AMOUNT SHOULD
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INCREASED OPERATING
COSTS

WHY?

INTEREST DURING CONSTRUCTION

1. What is it?
2. When is it needed?
3. When is it not necessary?

DEBT SERVICE COVERAGE

Defined as:

The amount of excess revenue

remaining after payment of

operating and maintenance

expenses and debt service.

DEBT SERVICE COVERAGE RATIO

Defined as:

Funds available for Debt Service
divided by Debt Service
coverage

Example:

Revenue: 9,000,000 SK

Operating
expenses: 1,000,000 SK

Funds available
for debt service: 8,000,000 SK

Debt Service: 6,000,000 SK

Coverage ratio: 1.33

TYPICAL FLOW OF FUNDS

Revenue Fund

Project Operating and Maintenance Expenses

Debt Service Fund

Build or replenish Debt Service Reserve fund

Project Repair and replacement fund

Excess Revenue Fund